UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,114	11/13/2001	Hiroshi Takahara	XA-9581	6447

7590 09/15/2003

Miles & Stockbridge P.C.
Suite 500
1751 Pinnacle Drive
McLean, VA 22102-3833

EXAMINER
CAMERON, ERMA C

ART UNIT	PAPER NUMBER
1762	

DATE MAILED: 09/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Notice of Allowability	Application No.	Applicant(s)	
	09/987,114	TAKAHARA ET AL.	
	Examiner	Art Unit	
	Erma Cameron	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *amendment filed 8/8/2003 and communication of 9/11/2003*.
2. ☒ The allowed claim(s) is/are *7-9,12,14-19,22 and 24-27*.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
   (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

8. ☐ CORRECTED DRAWINGS must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No. ____.
   (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
   (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1☐ Notice of References Cited (PTO-892)
3☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
5☐ Information Disclosure Statements (PTO-1449), Paper No. ____.
7☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
2☐ Notice of Informal Patent Application (PTO-152)
4☒ Interview Summary (PTO-413), Paper No.____ .
6☒ Examiner's Amendment/Comment
8☐ Examiner's Statement of Reasons for Allowance
9☐ Other .

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Nelson Shapiro on September 11, 2003.

2. The application has been amended as follows:

Below is a listing of the status of the claims. These were provided in a fax communication from Nelson Shapiro on September 11, 2003, to be incorporated in the application by examiner's amendment.

Claims 1-6 (cancelled)

7. (Currently amended) A method for manufacturing a wet friction material obtained by immersing binding agent into a paper body comprised of fiber base material and filler, comprising:

a first immersing step of immersing first binding agent, that comprises a phenol resin, into said paper body;

a second immersing step of immersing second binding agent, that comprises a silicon resin, into said paper body after said first immersing step; and

a heating and curing step of heating and curing said paper body into which said first and second binding agents were immersed,

wherein said friction material has a first layer and a second layer and wherein at said first immersing step said first bonding agent is immersed into said first layer and at said second immersing step said second bonding agent is immersed into said second layer.

8. (Currently amended) A method according to claim 7, wherein <u>said binding agents have a solvent therein and</u> drying steps of removing solvent in said binding agents immersed into said paper body are provided between said first immersing step and said second immersing step and between said second immersing step and said heating and curing step, respectively.

9. (previously added) A method according to claim 7, wherein only said first binding agent is immersed in said first layer, and said first and second binding agents are immersed in said second layer.

Claims 10 and 11 (cancelled)

12. (Currently amended) A method according to claim [[10]]<u>7</u>, wherein the silicon resin of said second binding agent comprises a cured material of hydrolysis liquid of silane coupling agent.

Claim 13 (Cancelled)

14. (Previously added) A method for manufacturing a wet friction material obtained by immersing binding agent

into a paper body comprised of fiber base material and filler, comprising:

a first immersing step of immersing first binding agent comprising phenol resin into said paper body;

a second immersing step of immersing second binding agent comprising silicon resin into said paper body after said first immersing step; and

a heating and curing step of heating and curing said paper body into which said first and second binding agents were immersed.

15. (Currently amended) A method according to claim 14, wherein said binding agents have a solvent therein and drying steps of removing solvent in said binding agents immersed into said paper body are provided between said first immersing step and said second immersing step and between said second immersing step and said heating and curing step, respectively.

16. (Previously added) A method according to claim 14, wherein said wet friction material has a first layer and a second layer, and at said first immersing step said first binding agent is immersed into said first layer and

at said second immersing step said second binding agent is immersed into said second layer.

17. (Previously added) A method according to claim 16, wherein only said first binding agent is immersed in said first layer, and said first and second binding agents are immersed in said second layer.

18. (Currently amended) A method for manufacturing a friction plate, comprising:

providing a body and a core plate to which a first side of the body is to be secured;

applying a first binding agent, that comprises a phenol resin, to said one side of the body to impregnate a first layer of said body with said first binding agent;

applying a second binding agent, that comprises a silicon resin, to a second side of the body to impregnate a second layer of the body with said second binding agent; and

securing the first side of the body to the core plate and leaving the second side of the body exposed as a frictional engagement surface.

19. (Previously added) A method according to claim 18, wherein the first binding agent impregnates both layers of the body and the second binding agent impregnates only the second layer.

Claims 20 and 21 (cancelled)

22. (Previously added) A method according to claim 18, wherein the body is a paper body comprised of fiber based material and filler.

23. (Cancelled)

24. (Currently amended) A method according to claim [[23]]18, wherein the silicon resin of said second binding agent comprises a cured material of hydrolysis liquid of silane coupling agent.

25. (Currently amended) A method according to claim 18, wherein the binding agents in the first and second layers are heated and cured after they have been applied.

26. (Currently amended) A method for manufacturing a wet friction material including a body having a front side and a reverse side, comprising:

applying a first binding agent, that comprises a phenol resin, to the reverse side of the body to impregnate a first layer of the body with the first binding agent; and

applying a second binding agent, that comprises a silicon resin, to the front side of the body to impregnate a second layer of the body with the second binding agent,

wherein the first and second binding agents are selected so that the second binding agent provides a ~~desired~~predetermined coefficient of friction and the first binding agent suppresses weakness of the second binding agent while maintaining elasticity of the second binding agent.

27. (Previously added) A method according to claim 26, wherein the body is a paper body~~, the first binding agent comprises a phenol resin and the second binding agent comprises a silicon resin~~.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erma Cameron whose telephone number is 703-308-2330. The examiner can normally be reached on 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on 703-308-2333. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Erma Cameron

ERMA CAMERON
PRIMARY EXAMINER

September 11, 2003

Erma Cameron
Primary Examiner
Art Unit 1762